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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,865	03/14/2006	Manfred Niederhufner	NIEDERHUFNER ET AL 1 PCT	9738
25889	7590	06/12/2009	EXAMINER	
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			BINDA, GREGORY JOHN	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/569,865	<b>Applicant(s)</b> NIEDERHUFNER ET AL.	
	<b>Examiner</b> Greg Binda	<b>Art Unit</b> 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 4 and 9-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4 and 9-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2009 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)                     | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 3679

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

*Election/Restrictions*

2. Applicant's election with traverse of the fixed homokinetic joint shown in Fig. 1 (Species I) in the reply filed on Oct. 10, 2008 has been acknowledged.

*Drawings*

3. The replacement drawings filed April 29, 2009 are objected to because they fail to show the angles recited in claim 4. Fig. 3 is alleged to show an installation angle between the inner and outer hubs, but instead it shows the hubs aligned, i.e. at an angle equal to zero. Fig. 4 is alleged to show the maximum operational angle between the inner and outer hubs, but instead it shows the hubs aligned.

4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the

Art Unit: 3679

renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

5. A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because extensive amount of changes made through amendment.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

6. The incorporation of essential material in the specification (see pages 8 & 11 as amended) by reference to a publication is improper. Applicant is required to amend the

Art Unit: 3679

disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

7. The disclosure is objected to because:

a. Page 8, line 19 describes “raccoon damage” which appears to be a typographical error of some sort since nothing in the disclosure pertains to a raccoon or any other animal.

b. A paragraph added to the page 13 includes undefined reference characters  $\alpha_O$ ,  $\alpha_I$ ,  $\beta_O$ ,  $\beta_I$ . Each character is supposed to represent an angle, but there is no description of where or how each angle is measured.

*Claim Rejections - 35 USC § 112*

8. Claims 18-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 18 recites the limitations, “a sleeve . . . is firmly connected to the inner joint part,” “a sealing mechanism . . . is firmly connected to the sleeve,” and “the sleeve comprises a continuous annular groove which is engaged by the sealing diaphragm by an inner annular bead

Art Unit: 3679

formed on the inner collar.” There is no support for these limitations in the application as originally filed. The only sleeve mentioned in the application as originally filed is one associated with the prior art (see page 2). The disclosed invention includes no such sleeve. To the contrary, the seal 11 is expressly disclosed (see page 11) as being attached directly to the inner hub 2, not some sleeve that’s connected to an inner joint part. Likewise there is no support in the application as originally filed for the limitations in claims 19 & 20.

9. Claims 4 & 9-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 17 recites the limitation, "the crests of the folds [run] essentially in one plane located approximately perpendicular to an axis". However, in the specification at page 11, the crests of the folds 15 are disclosed as slightly offset. It is unclear how and to what degree the crests can be offset and yet remain “essentially in one plane”.

b. Claim 13 contains the limitation “70 Shore”. Where a government or industry standard is used in a claim as a limitation, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph because the claim scope is uncertain since standards are subject to change over time. In order to overcome this rejection, the effective date of the standard applied should be included in the specification (no new matter can be entered). Applicant is encouraged to file a copy of the standard, (excerpts of the applicable portions are acceptable), via an information disclosure statement filed in accordance with 37 CFR 1.97 and 1.98.

Art Unit: 3679

c. Claim 18 recites the limitation "the inner collar". There is insufficient antecedent basis for this limitation in the claim.

d. Claim 21 recites the limitation, "the sleeve [which is firmly connected to the inner joint part] and the inner joint part are produced so as to form a unitary piece. The sleeve cannot be both connected to and a portion of, an inner joint part formed as a unitary piece. It is either one or the other.

*Claim Rejections - 35 USC § 103*

10. Claims 4 & 9-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al, US 3,688,521 (Smith) in view of Muller et al, US 4,630,834 (Muller). In Fig 1 Smith shows a fixed homokinetic joint (see also col. 5, line 43), comprising:

an inner hub.29;

an outer hub 26;

a carrier housing 25 and cap 46 surrounding the outer hub;

a plurality of tracks 30, 13 associated together in pairs provided in each of the inner hub and the outer hub;

a plurality of balls 31 received in the tracks;

a cage 37 guiding the balls to transfer torque;

a sealing arrangement 38 comprising a bellows 38 having a fold 42, a radially outer edge 40 being coupled to the carrier housing and a radially inner edge 39 coupled to the inner hub.

Smith does not show a plurality of folds such that the crests of the folds lie in essentially the same plane. In Fig. 1a, Muller shows a sealing arrangement 14 with a plurality of folds 16

Art Unit: 3679

such that the crests of the folds lie in essentially the same plane. Muller teaches in col. 2 providing a homokinetic joint with the sealing arrangement 14 in order to provide the joint with an adequate lubricant seal. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the fixed homokinetic joint of Smith by providing it with a sealing arrangement similar to that of Muller in order to provide the joint with an adequate lubricant seal.

As to claims 4 & 13, the combination of Smith and Muller includes every limitation of the claims except neither expressly discloses a maximal operational angle equal to  $10^{\circ}$ , the maximal installation angle greater than  $10^{\circ}$ , or the rubber bellows having a hardness of 70 Shore. However, it would have been obvious to one of ordinary skill in the art to design the maximal operational angle equal to  $10^{\circ}$ , the maximal installation angle greater than  $10^{\circ}$ , or the rubber bellows having a hardness of 70 Shore in the combination of Smith and Muller, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Note also that at page 20 of the reply filed April 22, 2009, applicant states that it is fully within the ability one skilled in the art to make a fixed homokinetic joint with the limitations in claim 4 without any explanation of additional structure that would be required to provide those limitations.

#### *Response to Arguments*

11. Applicant's arguments filed April 22, 2009 have been fully considered, but they are not persuasive.



Art Unit: 3679

- a. Applicant argues that the 112(2) rejection of claim 13 has been overcome because a copy of the standard upon which the offending limitation relies is included in the reply filed April 22, 2009. However the standard is in foreign language.
- b. Applicant argues that Smith fails to disclose a fixed homokinetic joint. However, in col. 5, line 43, Smith discloses a fixed homokinetic joint.

### *Conclusion*

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rzeppa shows a homokinetic joint with a sleeve B firmly connected to its inner joint part D. US 2007/00323303 shows a fixed homokinetic joint.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3679

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 10:30 am to 8:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg Binda/  
Primary Examiner, Art Unit 3679